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MARSHALL PROCEDURES AND GUIDELINES

AD01

AGENCY INFORMATION TECHNOLOGY SERVICES

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DOCUMENT HISTORY LOG

Status (Baseline/ Revision/ Canceled)	Document Revision	Effective Date	Description
Baseline		4/3/00	This document establishes the procedures and guidelines that govern MSFC's provision of Agency Information Technology services for which MSFC has responsibility.
Revision	A	5/9/03	Updated ISD to Office of the CIO; replaced the NISN section. Updated the Directives Master List URL in the footers. Put "CH" before the chapter paragraphs.

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PREFACE

P.1 PURPOSE

The purpose of this Directive is to document the responsibilities and procedures for providing the Agencywide Information Technology (IT) services for which Marshall Space Flight Center (MSFC) has responsibility.

P.2 APPLICABILITY

This Directive is applicable to all MSFC organizations, all MSFC support contractors, and other supporting organizations regardless of location.

P.3 AUTHORITY

MPD 2800.1, "Management of Information Technology Systems and Services"

P.4 APPLICABLE DOCUMENTS

None

P.5 REFERENCES

None

P.6 CANCELLATION

MPG 2800.1 Baseline, dated April 3, 2000

Original signed by
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Director

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DOCUMENT CONTENT

1. DEFINITIONS

1.1 Information Technology (IT). IT includes computer and communications systems, ancillary equipment, software applications, hardware, firmware, networks, and support personnel and services that enable Center personnel to generate, process, store, access, manipulate, and exchange information.

1.2 Specific definitions describing what constitutes each type of service are provided in the subsequent chapters detailing procedures for providing the service.

2. RESPONSIBILITIES - GENERAL

2.1 The Office of the Chief Information Officer (CIO), Center Operations (CO) Directorate, is responsible for providing five major categories of Agencywide IT services that are assigned to MSFC as part of the Center's mission, as presented in Chapters 1-5.

2.2 The Office of the CIO is responsible for establishing and maintaining the IT procedures and guidelines that govern provision of these services as part of MSFC processes.

3. PROCEDURE

Procedures applicable to each IT service are provided in the respective chapter for that service.

4. RECORDS

None

5. FLOW DIAGRAM

None

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CHAPTER 1

MIDRANGE SYSTEMS SUPPORT

CH1.1 Definitions

Midrange Systems. Midrange computers encompass a broad range between high-end workstations and mainframe systems. The cost of midrange systems can range from \$10,000 to more than a million dollars. Midrange computer systems are generally defined as 32-bit or 64-bit, single or multiprocessor computers, which operate under UNIX or NT operating systems. Midrange computers include, among others, such computers as those manufactured by IBM, SGI, SUN, Hewlett-Packard, and Compaq (including former Digital Equipment Corporation).

CH1.2 Responsibilities

CH1.2.1 The Office of the CIO provides both consolidated and distributed midrange systems. These services include:

- Application Integration
- Capacity Planning
- Computer Facilities Management
- Customer Support and Problem Resolution
- Hardware Acquisition and Maintenance
- Network Engineering
- Operating Systems Maintenance
- Performance Monitoring
- Software Licensing
- Storage Management
- System Administration
- Computer Security

CH1.2.2 The Sponsoring Organization (basic organization) and Office of the CIO ensure that adequate funding is available for the requested IT service. If the service request exceeds the Center Operations Directorate core services, or is CO non-core, then funding must be identified by the sponsoring organization. Funding for unique (non-core) requirements, such as hardware, software, or purchased services, is the responsibility of the sponsoring organization.

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CH1.3 Procedure

CH1.3.1 Midrange systems services are requested via two methods: (1) contacting the Office of the CIO Midrange Systems Support representative(s) who completes a service request on the customer's behalf; or, (2) by accessing the Service Request System (SRS), which is accessed via the World Wide Web at the following address: <https://srs.msfc.nasa.gov/catalog/bin/home.asp> and selecting "All Other Services."

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CHAPTER 2

NASA AUTOMATED DATA PROCESSING (ADP) CONSOLIDATION CENTER (NACC)

CH2.1 Definitions

CH2.1.1 Agencywide Distributed Environment (ADE). ADE is a group of midrange computers that is distributed throughout the Agency. Many of the computers are located at MSFC and used to host Agencywide client/server applications.

CH2.1.2 NASA Automated Data Processing (ADP) Consolidation Center (NACC). The NACC is an Agencywide computing resource located at MSFC and established for the centralized management of Agency mainframes and midrange systems. The NACC provides systems, operations, and management support for Agency computers. The NACC's IBM-compatible mainframe computer systems support administrative processing for all NASA Centers and NASA Headquarters, as well as Agencywide payroll processing and Agency administrative legacy software support. The NACC provides programmatic support on IBM-compatible mainframe computers for the Johnson Space Center (JSC) Integrated Management Information Computer (IMIC) workload, the JSC Space Station planning workload, and MSFC External Tank (ET) manufacturing workload.

CH2.2 Responsibilities

CH2.2.1 The Office of the CIO is responsible for oversight of contractor-managed systems and operations support which are required to provide NACC services. The Office of the CIO is responsible for ensuring that the following services meet customer service level requirements:

- Network availability
- System availability
- Workload throughput
- Response time
- Problem resolution and change requests
- Configuration management
- Currency of hardware and software

CH2.2.2 The NACC is directly responsible for:

CH2.2.2.1 Providing functional resource management and service areas for the mainframe systems and for midrange workloads as follows:

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- Customer Support and Problem Resolution
- Capacity Management
- Configuration Management and Change Control
- Customer and Data Center Security Management Responsibilities
- Production Scheduling and Production Problem Resolution
- Tape Management/Direct Access Storage Device (DASD) Management
- Resource Management
- Testing, Relocation, and Installation of Mainframe and Midrange Hardware and Software
- Performance Monitoring
- Software Licensing
- Long-range Planning
- Network Operations/Engineering
- Database Management
- Computer Systems Support
- Disaster Recovery Planning
- Facilities Planning and Support
- New Implementation of Capabilities and Features to Meet Customer Requirements and Technology Changes
- NACC Chargeback and Accounting

CH2.2.2.2 Providing operational support for the Agencywide workloads for ADE hardware and software used to support existing Agencywide client/server applications and to prototype new applications.

CH2.2.2.3 Providing operational support for the Early Budget System, which as a part of the Integrated Financial Management Program (IFMP), provides a standard Commercial Off-The-Shelf (COTS) budget software application.

CH2.3 Procedure

CH2.3.1 Workload Projections

CH2.3.1.1 Within a chargeback system, the NACC identifies cost elements, determines processing rates, and tracks both utilization and costs on a monthly basis for each NACC-supported workload. Hardware maintenance, software maintenance, support services, supplies, and facility costs are included within NACC rates. Rates are computed for central processing unit hours, disk storage, and tape storage.

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CH2.3.1.2 During the first quarter of each fiscal year (FY), the NACC initiates the NACC Workload Projection Call. The NACC sends the call to NASA Center Chief Information Officer (CIO) offices, Center NACC Technical Leads, Center NACC Project Team Members, and Center Resource Management Offices responsible for coordinating funding for NACC services. The call solicits updates for data processing requirements for the next 5 fiscal years. Based on the user-projected workloads, the NACC projects operational costs and recomputes rates for resource usage using the chargeback algorithms. During the FY Program Operating Plan (POP) Cycle, the NACC coordinates budget line items for NACC requirements on the Enterprise and the Center levels.

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CHAPTER 3

SUSTAINING ENGINEERING SUPPORT FOR AGENCYWIDE ADMINISTRATIVE SYSTEM (SESAAS)

CH3.1 Definitions

CH3.1.1 Agencywide Administrative Legacy Applications. Business computing systems that are used Agencywide. The applications are developed in ADABAS/Natural for NASA Agencywide use. These applications are: NASA Personnel/Payroll System (NPPS), NASA Supply Management System (NSMS), NASA Equipment Management System (NEMS), NASA Training and Development System (NTDS), Consolidated Agency Personnel/Payroll System (CAPPS), NASA Property Disposal Management System (NPDMS), and Acquisition Management System (AMS). Support is also provided to the AdminSTAR system, a non-ADABAS system.

CH3.1.2 Sustaining Engineering Support for Agencywide Administrative Systems (SESAAS). Provides the consolidation of the sustaining engineering support for the Agencywide administrative legacy applications and for the Agencywide application AdminSTAR.

CH3.2 Responsibilities

CH3.2.1 The Office of the CIO is responsible for:

CH3.2.1.1 Providing the Consolidation Center Project Manager who is responsible for the day-to-day project management for the Agencywide applications. These responsibilities include, but are not limited to, planning and estimating project resources for the Agencywide applications; costs and schedules; organizing and directing the project team; risk assessments and security certification of the core applications; and executing project activities within the approved time and budget limits.

CH3.2.1.2 Supporting production processes for the NEMS Central Database, NPMDS General Services Administration Error Report Transmission, CAPPS, and NPPS Employee Express.

CH3.2.1.3 Deploying the AdminSTAR application across the Agency, managing the centralized database, and providing the sustaining and integration support.

CH3.2.1.4 Providing IFMP support for data mapping of legacy data to IFMP applications, development of Agencywide interfaces, and

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making any modifications to the Agencywide systems required for IFMP.

CH3.2.2 Application Program Functional Managers are responsible for:

CH3.2.2.1 Providing the functional oversight for the respective Agencywide application and serving as the agent for the Headquarters functional sponsor.

CH3.2.2.2 Defining and approving requirement specifications and any changes to the applications related to functional regulations and policies.

CH3.2.2.3 Approving work plans for implementation of approved changes to the respective application during sustaining engineering.

CH3.3 Procedure

CH3.3.1 The Program Functional Manager, or a user of any of the Agencywide administrative legacy applications, documents changes to the systems using a NASA Form 1620, "Change Control Request." The Change Control Request form can be submitted in hardcopy to the Consolidation Center Project Manager or submitted electronically via the SESAAS web page located at <http://www.msfc.nasa.gov:80/sesaas/>.

CH3.3.2 Software discrepancies and other problems or questions are reported through the NASA Information Support Center (NISC), which provides 7-day-a-week, 24-hour-a-day support. A call to the NISC is handled by either providing an answer to the question or concern, providing a work around, or identifying an application discrepancy and creating a Change Control Request to document the discrepancy or requirement change.

CH3.3.3 The Change Control Request is evaluated by the Engineering Review Board for approval. Once approved by the Consolidation Center Project Manager, the respective program functional manager, and the Configuration Control Board (if applicable), the Change Control Request is allocated to a specific release. The change is implemented into production through the software release.

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CHAPTER 4

CONSOLIDATED NASA PERSONNEL/PAYROLL SYSTEM (CNPPS)

CH4.1 Definitions

Consolidated NASA Personnel/Payroll System (CNPPS). CNPPS is the only NASA legacy application that has been consolidated with a single occurrence of the application running against a centralized database. The MSFC Consolidated Payroll Office provides functional expertise for the NASA payroll and the Office of the CIO provides the technical expertise for the application. CNPPS is accessed by personnel and payroll personnel across the Agency.

CH4.2 Responsibilities

CH4.2.1 The Office of the CIO is responsible for:

CH4.2.1.1 Providing the project management, which includes planning; developing and maintaining schedules; identifying and assigning appropriate skills, such as programmers, database administrators, and system administrators; controlling costs; reporting; and providing all required documentation.

CH4.2.1.2 Providing all required computer services, including hardware, software, data storage, disaster recovery, network connectivity, tools and utilities, system administration, and computer platform security.

CH4.2.1.3 Providing all production control, operational, and sustaining engineering support.

CH4.2.2 The Consolidated Payroll Office (CPO), located at MSFC, is responsible for:

CH4.2.2.1 Providing the functional expertise in executing the NASA payroll and resolving any problems that might occur.

CH4.2.2.2 Providing the funds to maintain and operate the CNPPS.

CH4.3 Procedure

CH4.3.1 A user of CNPPS documents changes to the system using a NASA Form 1620, "Change Control Request." The Change Control Request form can be submitted in hardcopy to the Consolidation Center Project Manager or submitted electronically via the SESAAS

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web page located at <http://www.msfc.nasa.gov:80/sesaas/>, and selecting "Consolidated NPPS."

CH4.3.2 Software discrepancies and other problems or questions are reported through the NASA Information Support Center (NISC), which provides 7-day-a-week, 24-hour-a-day support. A call to the NISC is handled by either providing an answer to the question or concern, providing a work around, or identifying an application discrepancy and creating a Change Control Request to document the discrepancy or requirement change.

CH4.3.3 Change Control Requests are evaluated by the Engineering Review Board for approval. Once approved by the Consolidation Center Project Manager, the NPPS Program Functional Managers, and the Configuration Control Board (if applicable), the Change Control Request is allocated to a specific release. The change is implemented into production through the software release.

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CHAPTER 5

NASA INTEGRATED SERVICES NETWORK (NISN)

The NISN provides for the transport and delivery of NASA Wide Area Network (WAN) communications services. NISN provides both digital and analog services, dedicated and switched circuits, packet data transport, wide area networking, domain name service, and various data networks. Voice, video, and facsimile services are also available. NISN customers include all NASA centers as well as contractor locations, universities, laboratories, and international locations.

CH5.1 Definitions

CH5.1.1 Videoteleconferencing (ViTS). The NASA ViTS is a video teleconferencing service providing interactive point-to-point and multipoint conferencing capabilities to NASA locations, selected contractor facilities, and public video conferencing services. ViTS supports point-to-point calls ranging from 128 kilobits per second (kb/s) to 1472 kb/s and NISN Video Bridge assisted multipoint calls ranging from 128 kb/s to 768 kb/s. The ViTS services include provisioning and maintaining special video conferencing rooms, scheduling of video conferences, and the transmission and distribution of the video and audio among the participating locations. ViTS rooms can consist of multiple cameras, an audio conferencing system, projection screens, still-frame graphics, and an integrated room control system.

CH5.1.2 ViTS Rollabout System (VRA). The VRA is a ViTS roll-about system designed for smaller conference rooms and office areas and can be relocated easily to different rooms that contain network drops. VRA supports point-to-point calls ranging from 128 kb/s to 1472 kb/s and NISN Video Bridge assisted multipoint calls ranging from 128 kb/s to 768 kb/s. The VRA consists of a 50" Plasma screen mounted on a Roll-about cart. It is controlled by a user friendly, hand held remote control. Optional features include a VCR and document camera with stand.

CH5.1.3 Video Distribution Service. The NISN Video Distribution Service provides for the distribution of video signals in support of NASA programs. The particular implementation is dependent on the specific requirements of the program and may involve terrestrial or satellite transmission, with or without the utilization of digital compression and encoding techniques.

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CH5.1.4 Voice Teleconferencing Service (VoTS). NASA VoTS provides for the audio meeting and conferencing needs of the Agency. The VoTS provides for the scheduling and setup of operator initiated or meet-me conferences. This service also includes the provisioning and maintaining of room audio conferencing systems.

CH5.1.5 Switched Voice Service. NASA's long distance telephone requirements are provided under this service. The service provides both domestic and international long distance dialing services for NASA and selected contractor personnel and includes the provisioning of toll-free inbound (800/866/877/888 numbers) and calling card services. The government's Federal Telecommunications System (FTS) 2001 contract provides most of this service.

CH5.1.6 Dedicated (Mission) Voice Service. Dedicated Voice Service encompasses a wide range of services and service complexity. At its simplest, it can be a dedicated point-to-point "shout down" circuit with no signaling. However, the majority of Dedicated Voice services consists of a system of highly reliable, dedicated voice circuits working in conjunction with Center switching/ conferencing systems to create inter-connected voice communications loops. The voice loops interconnect the different Center voice distribution systems that support diverse missions within the Agency.

CH5.1.7 Fax Broadcast and Secure Fax Services. Facsimile broadcast provides the capability for NASA users to send a document to multiple recipients, as established on a preset distribution list, via a single transmission. Secure facsimile machines designed to interface with customer-owned cryptographic devices and meet National Security policies are available by special arrangement.

CH5.1.8 Routed Data Services. Four service performance categories for routed data services have been defined: (1) Real-time Critical (2) Mission Critical, (3) Premium, and (4) Standard. NISN expects that the definitions of these performance categories will evolve as they are mapped against the existing and planned needs of our customers. Note that requirements that may not be satisfied by these performance categories may be supported under a custom service. Real-time Critical and Mission Critical data services are presently routed over FTS2000/NSAP-

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like dedicated circuits, while Premium and Standard data services are routed typically over shared Asynchronous Transfer Mode (ATM) backbone circuits. Networks comprised of different service performance categories can be installed at a customer location to provide increased reliability. Service performance metrics for the four categories of domestic IP routed data service are listed in the following table:

Performance Standards for IP Routed Data (by Service Category)

Service Category	Availability ⁴	Restoral Time ⁴	Coverage Period	Acceptable Packet Loss	Round Trip Time ⁵
Real-time Critical	99.98%	< 1 min ¹	24X7	0.001%	<120 ms
Mission Critical	99.95%	2 hr ²	24X7	0.001%	<120 ms
Premium	99.50%	4 hr ²	24X7	<1.0%	<100 ms
Standard	99.50%	<24 hr ^{2,3}	6 a.m. Eastern Monday to 6 p.m. Pacific, Friday	1.0%	<250 ms

Note 1: A capability for immediately switching to an alternate data path must exist.

Note 2: These restoral times represent the time to restore service to the user and assume immediate access to the user's facility to repair/replace equipment if necessary.

Note 3: The 24 hour restoral time results from the decreased priority given to standard service as compared to the other classes of service and from the fact that standard routed data service equipment is often a considerable distance from a NASA operating location.

Note 4: These values apply only for those parts of the WAN service supported by the NISN mission services backbone infrastructure. These values do **not** apply to tail circuits unless the circuits/services were specifically ordered and supplied with diverse routing end-to-end.

Note 5: Round Trip Time (latency) is specified for data flow between wide area network nodes controlled and operated by NISN. Latency is a function of distance and carrier capabilities. User applications that are sensitive to latency must be engineered to account for the upper limit

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round trip times specified in the above table.

CH5.1.9 Dedicated Data Services. Dedicated Data Services are currently available at rates from as low as 9.6 kb/s up to multiples of 1.5 megabits per second (Mb/s) (2.0 Mb/s with geographic restrictions) with the most common rates being 56 kb/s and 1.5 Mb/s. Other rates require special engineering to implement. Availability and implementation intervals would be negotiated on an individual requirement basis

CH5.1.10 Switched Data Services. Switched 56 kb/s (S56) data services are available for customers who require bandwidth often but only for a short period during each session. This service provides high-speed synchronous data transmission between source and destination. S56 services may also be used in support of audio/video/data teleconferencing, bulk data transfer, and overflow/backup services.

CH5.1.11 The High Rate Data and Video. The High Rate Data System (HRDS) is a one-way (simplex), multi-mode/multi-channel system designed for operation over a full C-band (36 Mhz) domestic communications satellite transponder. Specifically, it is used to provide the ground communications path between the White Sands Complex (WSC) and the user at Johnson Space Center (JSC). (Additionally, a technical monitoring capability exists within the GSFC technical control facility.) This service provides a medium for transport of a TDRSS user's digital baseband return link when the rates are two Mb/s or higher. The system has an upper limit for the user's data of 48 Mb/s. The satellite transponder utilized for HRDS services is also configurable to provide video transmission from WSC to JSC and GSFC or from Kennedy Space Center (KSC) to JSC, MSFC, and GSFC.

CH5.1.12 Secure Communications. Secure Communications services are invoked whenever there are requirements for one or more of the following:

- a. Secure Telephone Unit (STU)-III and Secure Terminal Equipment (STE) devices
- b. Secure facsimiles
- c. Secure Data Devices (SDD)
- d. Secure voice teleconferencing
- e. Circuit encrypters
- f. Automatic Digital Network (AUTODIN) interface

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- g. Key management centers
- h. End-user encryption
- i. Electronic key management systems
- j. Other new protective technologies

Requirements for secure communications must always be coordinated through your Center's NASA Communications Security (COMSEC) Account Managers (CAM).

CH5.1.13 Network Integration and Consulting. Whether a customer's requirement is as small as a simple data link between two points or as complex as a dedicated subnetwork for a specific project, consulting and integration services are available to provide the customer with one-stop shopping for the satisfaction of communication and network requirements. If the requirement is unique or does not easily fall within standard service offerings, consulting staff is offered to work with the customer to provide a tailored solution to the unique needs of a project.

Examples of available services include:

- a. Requirements Analysis
- b. Subnetwork Engineering & Design
- c. Implementation Coordination
- d. Prototyping Activities
- e. Network Traffic Modeling
- f. Security Controls Analysis & Design

CH5.1.14 Basic Rate Interface. Integrated Services Digital Network (ISDN) Basic Rate Interface (BRI) is the most basic ISDN interface. ISDN BRI provides the customer with two 64 kb/s Bearer (B) channels and one 16 kb/s Data (D)-channel, each of which may be shared by numerous ISDN devices. It is the ideal service for homes and small offices, which, in the interest of controlling expenses, require a service that can integrate multiple communications needs. BRI lines can be used for lower speed video calls or dial back up to dedicated data lines and simultaneous voice and data connections. It is ideal for telecommuting workplaces and long distance learning.

CH5.1.15 Primary Rate Interface. In North America, ISDN Primary Rate Interface (PRI) includes one 64 kb/s D-channel and 23 B-channels in North America (30 B-channels in most other parts of the world). The number of B-channels is limited by the size of

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the standard trunk line used in the region; T1 in North America and Japan and E1 most everywhere else. Unlike BRI, PRI does not support a bus configuration, and only one device can be connected to a PRI line. Sample uses are terminations to a router for data transmission, a Coder-Decoder (CODEC) for Video calls or a Private Branch Exchange (PBX) for voice calls. The connection to the PBXs allows use of some of the better-known features of ISDN such as caller ID.

CH5.1.16 International Services. International data distribution services are provided to many of NASA's international partners and agencies through cooperative arrangements. Rather than purchase dedicated circuits for each requirement, cooperative consolidation and integration of various requirements into an economical infrastructure provide the basic connectivity for programmatic requirements for the transport of data, voice, facsimile, electronic mail, and video. To the greatest extent feasible and economical, these gateway and consolidated circuits support all other data distribution services.

CH5.1.17 Russian Information Technology Service. The Russian Information Technology Service provides Data Distribution and Information Technology services in support of the IT needs of NASA in communicating with NASA and Russian personnel located in Russia. These services are depicted in the following table.

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Russia IT Services and Performance Standards

Service	Availability	MTTR	Latency (Round Trip)	Other
Mission Critical Voice	99.98%	< 5 Minutes	< 700 ms	< 1% Harmonic distortion <-40dBm0 noise level Capability to immediately switch to alternate path.
Mission Non-Critical Voice	99.95%	< 2 Hours	< 700 ms	< 1% Harmonic distortion < -40dBm0 noise level
Admin Voice/FAX	99.95%	< 4 Hours	< 300 ms	P3 Grade of Service
Mission Critical Data	99.98%	< 1 Minute	< 300 ms	Capability to immediately switch to alternate data path. <.001% Packet Loss
Mission Non-Critical Data	99.95%	< 2 Hours	< 300 ms	<.001% packet loss
Admin Data	99.95%	< 4 Hours	< 300 ms	< 1% packet loss
Mission/Admin Video	99.95%	< 4 Hours	< 300 ms	
Admin Video	99.95%	< 4 Hours	< 300 ms	

As NASA's total IT service provider in the Russian Federation, NISN Russia Services also provides:

- a. Personal Computers, software applications, servers, and local area networks comprising office automation infrastructures
- b. NASA and FTS telephone services
- c. Electronic Mail
- d. Data and Applications Hosting services

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- e. Network Security inclusive of intrusion detection and anti-virus protection
- f. 24x7 Network Monitoring
- g. 24x7 Help Desk
- h. Mission Support for the Houston Support Room (HSR) at Mission Control Center-Moscow (MCC-M)
- i. Web Services for online guidelines and procedures, phonebooks, etc.
- j. IT and Telecommunications Life-cycle Support: from Hardware/Software Procurement, Crating, Shipping, Exporting, Importing Controls, Security Procedures and Installation

This service provides a significant variety of support to NASA projects working in association with the Russian Federation. Major projects currently supported include the International Space Station, the International Affairs Office, an Earth Observing System (EOS) experiment, and the interchange of data and information between NASA's and Russia's science communities.

CH5.1.18 Ad Hoc Communications Services. There are circumstances in the provision of communication services for certain NASA supported or sponsored endeavors where, because of the constraints of time and space, advance planning may not be possible, or the physical demands of a requirement may render more traditional fixed site communications management and implementation strategies inadequate. Services to sites not served by traditional carrier infrastructures, services to mobile sites, or services for short periods of time require in-depth knowledge of current communications technologies, their possibilities and limitations all require specialized management for their implementation, in-service operation, and termination when the service requirement ends.

CH5.1.19 Domain Name Service. NISN registers NASA.GOV domain names and administers the NASA.GOV Internet domain naming policies, conventions, and the Domain Name Servers within NASA. Sub-domain management is conducted by the appropriate NASA centers/organizations.

CH5.1.20 NASA Directory Service. The NASA Directory Service is based upon the international X.500 standard for the organization and presentation of a hierarchical directory service infrastructure. The SCDS NISN organization provides an infrastructure consisting of an Agency level system and centralized support of center level systems for maintaining the

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disbursed hardware and software systems. The NASA Directory Service was primarily established to assist in the standardization of the various NASA electronic mail addressing and look-up. The use of the Directory Services has expanded to include FAX number, pager number, building and room, telephone number, a unique identifier, and address look-up information. In the future, the capability of using the directory service for supporting public-private key encryption systems to support privacy and authentication needs of Agency programs is envisioned along with use of the Unique Identifier supporting the NASA Integrated Financial Management Project.

CH5.2 Responsibilities

CH5.2.1 The NISN project office in the Office of the CIO is responsible for:

CH5.2.1.1 Managing the NISN networks and services

CH5.2.1.2 Providing NISN services to the MSFC community, as well as the Agency

CH5.2.1.3 Reviewing the NISN security related services with the appropriate physical and information technology security organizations at MSFC and across the Agency.

CH5.2.2 Directors/Managers of Basic Organizations are responsible for approving and funding NISN service requests. All NISN service requests must be approved by the program manager, office director, or department manager of the requesting organization.

CH5.3 Procedure

CH5.3.1 NISN services are requested via two methods: (1) by contacting the NISN Site Representative. The site representative will complete and submit a NISN Service Request (NSR) on the customer's behalf. (2) Contacting the NASA MSFC NISN Center Representative (see [nism.nasa.gov](https://repository.msfc.nasa.gov/directives/directives.htm) for the most current list of center and site representatives).